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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,577	12/23/1999	Lester F. Ludwig	VISN-007/03U	7628
7590	07/08/2004	SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3213	EXAMINER	ENG, GEORGE
			ART UNIT	PAPER NUMBER
			2643	
			DATE MAILED: 07/08/2004	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/471,577	LUDWIG, LESTER F.	
	Examiner George Eng	Art Unit 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 July 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-3 and 17-52 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-3 and 17-52 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/14/2003 (paper no.26) has been entered.

Response to Amendment

2. This Office action is in response to the amendment filed 7/14/2003 (paper no. 25).

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,751,338 (hereinafter Ludwig) in view of U.S. Patent No. 5,382,972 (hereinafter Kannes).

Regarding claim 1, Ludwig discloses a system for providing multimedia telecommunication services to a plurality of multimedia workstations comprising a public digital telephone network, a plurality of user workstation, and a multimedia central office in communication with the public digital telephone network for transceiving audio, video and digital data signals to and from the public digital telephone network to provide multimedia telecommunication services, wherein the multimedia central office being coupled at least one other workstations not associated with the public digital telephone network, i.e., a telephone loop plant (col. 43 line 46 through col. 44 line 6). Ludwig differs from the claimed invention in not specifically teaching the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user. However, Kannes teaches a conference system for interactive video, as well as audio, communication including a composite video signal generation means for combining captured video image into a mosaic image for reproduction (figures 4A-4B and col. 10 line 24 through

col. 11 line 44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Ludwig in having the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user, as per teaching of Kannes, because it allows tremendous equipment cost savings.

5. Claims 1-3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,081,291 (hereinafter Ludwig) in view of U.S. Patent No. 5,382,972 (hereinafter Kannes).

Regarding claim 1, Ludwig discloses a system for providing multimedia telecommunication services to a plurality of multimedia workstations comprising a public digital telephone network, a plurality of user workstation, and a multimedia central office in communication with the public digital telephone network for transceiving audio, video and digital data signals to and from the public digital telephone network to provide multimedia telecommunication services, wherein the multimedia central office being coupled at least one other workstations not associated with the public digital telephone network, i.e., a telephone loop plant (col. 43 line 52 through col. 44 line 6). Ludwig differs from the claimed invention in not specifically teaching the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user. However, Kannes teaches a conference system for interactive video, as well as audio, communication including a composite video signal generation means for combining captured video image into a mosaic image for reproduction (figures 4A-4B and col. 10 line 24 through

col. 11 line 44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Ludwig in having the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user, as per teaching of Kannes, because it allows tremendous equipment cost savings.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-3 and 17-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is unclear how the multimedia central office further being coupled to at least one other workstation not associated with the first premises network, and how the at least one other workstation not associated with the first premises network in related to a plurality of user workstations interconnected by the first premises network. In addition, it is unclear whether the limitation “a workstation of at least one user” (claim 1, line 17) is referring to one of a plurality of user workstations interconnected by the first premises network or one other workstation not associated with the first premises network.

Claims 2-3 and 17-52 are also rejected because of depending on claim 1 containing the same deficiency.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 17-35, 40, 43-45 and 47-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landante et al. (US PAT. 5,555,017 hereinafter Landante) in view of Friedell et al. (US PAT. 5,491,508 hereinafter Friedell).

Regarding claim 1, Landante discloses a system for providing video communication services to one or more premises, at least one premise including a plurality of video communications-services users, the system comprising a first premises network (108, figure 2), a plurality of user workstations (104, 106) interconnected by the first premises network, each of said plurality of user workstations having one or more user interfaces including input means and output means for processing multimedia electronic signals representing audio, video and data (col. 5 lines 30-44) so that one of ordinary skill in the art would recognize each of said plurality of user workstations having one of at least video and audio capture reproduction capabilities, video sink and display capabilities and both at least video and audio reproduction capabilities and video sink and display capabilities, and a multimedia server (102, figure 2) read as a multimedia central office, in use, transceiving audio, video and digital data signals for providing at least switching functions originating at or destined for at least one user workstation to and from the first premises network to provide video communications services (col. 4 line 8 through

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col. 5 line 29 and col. 7 line 12 through col. 8 line 42). In addition, Landante also discloses the multimedia server having one or more network interfaces for communicating over different communication networks (col. 3 line 48 through col. 4 line 7) so that one of ordinary skill in the art of Landante teaches the multimedia service being in communication with the first premises network and being adapted for coupling to other networks, i.e., a public digital network, thereby the multimedia server is capable of being coupled to at least one other workstation that is not associated with the first premises network. Landante differs from the claimed invention in not specifically teaching the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user. However, Friedell teaches a conference system for interactive video, as well as audio, communication, including a composite video signal generation means for combining captured video image into a mosaic image for reproduction (col. 1 line 59 through col. 2 line 15 and col. 8 lines 10-47) in order to simplify wiring layout and make easier to set up. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Landante in having the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user, as per teaching of Friedell, in order to simplify wiring layout and make easier to set up.

Regarding claim 2, Friedell discloses the mosaic image being a combination of at least one first premises user's image and the image of a user of the other workstation (col. 8 lines 13-17).

Regarding claim 3, Landante teaches the multimedia server being coupled to different networks, i.e., a public digital network, in use providing aggregation of demand for telecommunications services to groups of subscriber at different premises (col. 3 line 48 through col. 4 line 7).

Regarding claims 17-18, Landante discloses the multimedia server operative to provide multimedia mail capabilities among the video communication services and to accept a plurality of access protocols in the communications with the first premises network (col. col. 4 line 58 through col. 5 line 29).

Regarding claim 19, Landante discloses the multimedia server in communication with the first premises via conventional wire pair, i.e., unshielded twisted pair, wiring operative to carry information using the Ethernet protocol (col. 9 lines 11-67).

Regarding claim 20, Landate discloses the multimedia server operative to accept a plurality of user video compression protocol (col. 6 line 53 through col. 7 line 5).

Regarding claim 21, Landante teaches the multimedia server having one or more network interface to interconnect with another multimedia server using different networks, i.e., a public digital network (figure 1 and col. 3 lines 48-67).

Regarding claims 22-25, Freidell teaches a resource allocation system operative to provide automatically a designation of which one or more of the plurality of hubs realizes the mosaic image, comprising a plurality of captured video image in one or more of the plurality of hubs based on optimality conditions, wherein the optimality conditions take into account which system resources are currently active and which are currently free (col. 6 line 34 through col. 7 line 12 and col. 8 lines 10-29).

Regarding claims 26-28, Friedell teaches to generate the mosaic image (col. 8 lines 10-47) so that one of ordinary skill in the art would recognize of using different techniques, i.e., pixel domain technique, variable-length code word domain technique, or DCT domain technique, to create the mosaic image.

Regarding claim 29, Friedell teaches to connect at least one other workstation to the hub by radio frequency link (col. 3 lines 32-57).

Regarding claim 30, Friedell teaches to use a distribute conference bridge for creating the mosaic image (col. 8 lines 10-17).

Regarding claim 31, it is old and notoriously well known in the art of providing video close-ups in addition to the mosaic image in order to make user friendly.

Regarding claims 32-33, Friedell discloses a conference bridge server for creating the mosaic image with assignable input cells, output cells and composite cell and having a combiner circuit for combining the input cells and output cells associated with a same user port into a common entity (figure 5 and col. 8 lines 17-47).

Regarding claims 34-35, Landante teaches the multimedia server operative to all parties to see and hear each other (col. 13 line 50 through col. 14 line 12) so that one of ordinary skill in the art would recognize the multimedia server operative to provide data sharing services, as well as application sharing, to the plurality of user workstations.

Regarding claim 40, Landante discloses the multimedia server providing directory services to the plurality of user workstations (figure 3).

Regarding claims 43-45, Landante teaches the multimedia server providing variety of features of communicating multimedia information among a plurality of endpoints (col. 4 line 35

through col. 5 line 9) so that one skill in the art would recognize the multimedia server for providing data visualization services and customized video clips to the plurality of endpoints.

Regarding claim 47, Landante teaches the multimedia server comprising shared codec banks (col. 4 line 50 through col. 5 line 29).

Regarding claims 48-49, Landante teaches the multimedia server providing at least one video communication service using service primitives designed to support evolvable communication services (col. 4 lines 35-46).

Regarding claims 50-52, Landante discloses the multimedia server providing interfacing with third party service providers and video communications service to a plurality of premise networks, wherein the multimedia server accepts plurality of access protocols in connecting with the plurality of premises network (col. 3 line 48 through col. 5 line 7 and col. 5 lines 15-29).

10. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landante et al. (US PAT. 5,555,017 hereinafter Landante) in view of Friedell et al. (US PAT. 5,491,508 hereinafter Friedell) as applied to claim 1 above, and further in view of Kannes (US PAT. 5,382,972).

Regarding claims 36-37, the combination of Landante and Friedell differs from the claimed invention in not specifically teaching the multimedia server operative to provide conference recording services to the plurality of workstations, wherein the multimedia server provides synchronized audio, video, and graphics in captured and stored during conference recording for later playback. However, Kannes teaches a conference system comprising a plurality of recording/playback units for recording the plurality of workstations during

conference in order to allow a group of conferees to later playback, thereby makes user friendly (col. 6 line 49 through col. 7 line 38). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Landante and Friedell in having the multimedia server operative to provide conference recording services to the plurality of workstations, wherein the multimedia server provides synchronized audio, video, and graphics in captured and stored during conference recording for later playback, as per teaching of Kannes, to allow a group of conferees to later playback, thereby makes user friendly.

11. Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landante et al. (US PAT. 5,555,017 hereinafter Landante) in view of Friedell et al. (US PAT. 5,491,508 hereinafter Friedell) as applied to claim 1 above, and further in view of Hamrick, Jr. (US PAT. 5,504,808 hereinafter Hamrick).

Regarding claims 38-39, the combination of Landante and Friedell differs from the claimed invention in not specifically teaching the multimedia server operative to provide a usage monitoring capability, wherein the usage monitoring provides information to a billing system. However, it is old and notoriously well known in the art of a telecommunication system having a central system server for monitoring the duration of a user's communication usage, wherein the information of the user's communication usage provides to a billing system in order increase the revenue, for example see Hamrick (abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Landante and Friedell in having the multimedia server operative to provide a usage monitoring

capability, wherein the usage monitoring provides information to a billing system, as per teaching of Hamrick, in order to increase the revenue.

12. Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landante et al. (US PAT. 5,555,017 hereinafter Landante) in view of Friedell et al. (US PAT. 5,491,508 hereinafter Friedell) as applied to claim 1 above, and further in view of Flohr (US PAT. 5,374,953).

Regarding claims 41-42, the combination of Landante and Friedell differs from the claimed invention in not specifically teaching at least one other workstation being a home interactive TV endpoint, wherein the multimedia server provides video on demand services to a plurality of workstations with which it communicates. However, Flohr teaches a videoconferencing network having a plurality of workstations such that each workstation is configured to receive TV signals, as well as video on demand services, from a video server (col. 9 line 26 through col. 10 line 22) in order to enable the workstations to participate flexibly in multimedia exchanges. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Landante and Friedell in having at least one other workstation being a home interactive TV endpoint, wherein the multimedia server provides video on demand services to a plurality of workstations with which it communicates, as per teaching of Flohr, in order to enable the workstations to participate flexibly in multimedia exchanges.

13. Claims 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landante et al. (US PAT. 5,555,017 hereinafter Landante) in view of Friedell et al. (US PAT. 5,491,508 hereinafter Friedell) as applied to claim 1 above, and further in view of Kostreski et al. (US PAT. 5,635,979 hereinafter Kostreski).

The combination of Landante and Friedell differs from the claimed invention in not specifically teaching the multimedia server providing video feeds into videogames. However, it is old and notoriously well known in the art of a central storage center to offer a variety of functionally services including providing video feeds into videogames in order to provide enhanced capabilities, for example see Kostreski (col. 1 line 38 through col. 2 line 5). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Landante and Friedell in having the multimedia server providing video feeds into videogames, as per teaching of Kostreski, in order to provide enhanced capabilities.

Response to Arguments

14. Applicant's arguments with respect to claims 1-3 and 17-52 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Burton et al. (US PAT. 5,572,347) discloses a switched video architecture for an optical fiber to the curb telecommunication system (abstract).

Shibata et al. (US PAT. 5,446,491) discloses a multi-point videoconference system including a plurality of terminals and a network having a shared frame memory to store video information from plural terminals, and a display frame memory to output the video information in a synchronous fashion (abstract and col. 3 line 3 through col. 4 line 3).

16. Any response to this action should be mailed to:

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Or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tuesday to Friday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz, can be reached on (703) 305-4870. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



George Eng
Primary Examiner
Art Unit 2643